

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/525,643A  
Source: IFWQ  
Date Processed by STIC: 7/6/06

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IFWO

## RAW SEQUENCE LISTING

DATE: 07/06/2006

PATENT APPLICATION: US/10/525,643A

TIME: 17:46:09

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\07062006\J525643A.raw

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3 <110> APPLICANT: COUKOS, George
4     CONEJO-GARCIA, Jose R
6 <120> TITLE OF INVENTION: IMMUNE CELL RECEPTOR LIGAND AND IMMUNE CELL
RECEPTOR
8 <130> FILE REFERENCE: 555-88
10 <140> CURRENT APPLICATION NUMBER: 10/525,643A
11 <141> CURRENT FILING DATE: 2005-02-25
13 <150> PRIOR APPLICATION NUMBER: PCT/US03/27488
14 <151> PRIOR FILING DATE: 2003-09-04
16 <150> PRIOR APPLICATION NUMBER: 60/408,397
17 <151> PRIOR FILING DATE: 2002-09-04
19 <150> PRIOR APPLICATION NUMBER: 60/478,371
20 <151> PRIOR FILING DATE: 2003-06-13
22 <160> NUMBER OF SEQ ID NOS: 21
24 <170> SOFTWARE: PatentIn Ver. 2.1
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 148
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Description of Artificial Sequence:human ligand
for NKG2D receptor
35 <400> SEQUENCE: 1
36 accataccag tgagggtgaa tgtgtacacg cccagcttcc tgcctgttac tctccacagt 60
37 atgcgaagaa tatccctgac ttctagccct gtgcgccttc ttttgtttct gctgttgcta 120
38 ctaatagcct tggagatcat ggttggtg                                     148
41 <210> SEQ ID NO: 2
42 <211> LENGTH: 257
43 <212> TYPE: DNA
44 <213> ORGANISM: Artificial Sequence
46 <220> FEATURE:
47 <223> OTHER INFORMATION: Description of Artificial Sequence:human ligand
for NKG2D receptor
49 <400> SEQUENCE: 2
50 gtcactctct ttgcttcaac ttcactataa aatcattgtc cagacctgga cagccctggt 60
51 gtgaagcgca ggtcttcttg aataaaaaatc ttttccttca gtacaacagt gacaacaaca 120
52 tgggtcaaac tctgggcctc ctgggggaaga aggtatatgc caccagcact tggggagaat 180
53 tgacccaaac gctgggagaa gtggggcgag acctcaggat gtcctttgt gacatcaaac 240
54 cccagataaa gaccagt                                     257
58 <210> SEQ ID NO: 3
59 <211> LENGTH: 276
60 <212> TYPE: DNA
61 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:

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64 <223> OTHER INFORMATION: Description of Artificial Sequence:human ligand  
for NKG2D receptor

66 <400> SEQUENCE: 3

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67 gatccttcca ctctgcaagt cgagatgttt tgtcaacgtg aagcagaacg gtgcactggg 60
68 gcacccctggc agttcgccac caatggagag aaatccctcc tctttgacgc aatgaacatg 120
69 acctggacag taattaatca tgaagccagt aagatcaagg agacatggaa gaaagacaga 180
70 gggctggaaa agtatttcag gaagctctca aaggagact gcgatcactg gctcagggaa 240
71 ttcttagggc actgggaggc aatgccagaa ccgaca 276

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74 &lt;210&gt; SEQ ID NO: 4

75 &lt;211&gt; LENGTH: 204

76 &lt;212&gt; TYPE: DNA

77 &lt;213&gt; ORGANISM: Artificial Sequence

79 &lt;220&gt; FEATURE:

80 <223> OTHER INFORMATION: Description of Artificial Sequence:human ligand  
for NKG2D receptor

82 &lt;400&gt; SEQUENCE: 4

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83 gtgtcaccag taaatgcttc agatatccac tggctcttctt ctagtctacc agatagatgg 60
84 atcatcctgg gggcattcat cctgttagtt ttaatgggaa ttgttctcat ctgtgtctgg 120
85 tggcaaaatg gtgagtggca ggctgtctc tggcccttga ggacgtctta gtctggtaa 180
86 gactcaagag aggtgaatca tggg 204

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89 &lt;210&gt; SEQ ID NO: 5

90 &lt;211&gt; LENGTH: 244

91 &lt;212&gt; TYPE: PRT

92 &lt;213&gt; ORGANISM: Artificial Sequence

94 &lt;220&gt; FEATURE:

95 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:ULBP1

97 &lt;400&gt; SEQUENCE: 5

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98 Met Ala Ala Ala Ala Ser Pro Ala Phe Leu Leu Cys Leu Pro Leu Leu
99   1           5           10           15
101 His Leu Leu Ser Gly Trp Ser Arg Ala Gly Trp Val Asp Thr His Cys
102           20           25           30
104 Leu Cys Tyr Asp Phe Ile Ile Thr Pro Lys Ser Arg Pro Glu Pro Gln
105           35           40           45
107 Trp Cys Glu Val Gln Gly Leu Val Asp Glu Arg Pro Phe Leu His Tyr
108           50           55           60
110 Asp Cys Val Asn His Lys Ala Lys Ala Phe Ala Ser Leu Gly Lys Lys
111           65           70           75           80
114 Val Asn Val Thr Lys Thr Trp Glu Glu Gln Thr Glu Thr Leu Arg Asp
115           85           90           95
117 Val Val Asp Phe Leu Lys Gly Gln Leu Leu Asp Ile Gln Val Glu Asn
118           100          105          110
120 Leu Ile Pro Ile Glu Pro Leu Thr Leu Gln Ala Arg Met Ser Cys Glu
121           115          120          125
123 His Glu Ala His Gly His Gly Arg Gly Ser Trp Gln Phe Leu Phe Asn
124           130          135          140
126 Gly Gln Lys Phe Leu Leu Phe Asp Ser Asn Asn Arg Lys Trp Thr Ala
127           145          150          155          160
129 Leu His Pro Gly Ala Lys Lys Met Thr Glu Lys Trp Glu Lys Asn Arg
130           165          170          175
132 Asp Val Thr Met Phe Phe Gln Lys Ile Ser Leu Gly Asp Cys Lys Met
133           180          185          190
135 Trp Leu Glu Phe Leu Met Tyr Trp Glu Gln Met Leu Asp Pro Thr
136           195          200          205

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138 Lys Pro Pro Ser Leu Ala Pro Gly Thr Thr Gln Pro Lys Ala Met Ala
139      210                      215                      220
141 Thr Thr Leu Ser Pro Trp Ser Leu Leu Ile Ile Phe Leu Cys Phe Ile
142 225                      230                      235                      240
144 Leu Ala Gly Arg
148 <210> SEQ ID NO: 6
149 <211> LENGTH: 246
150 <212> TYPE: PRT
151 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Description of Artificial Sequence:ULBP2
156 <400> SEQUENCE: 6
157 Met Ala Ala Ala Ala Thr Lys Ile Leu Leu Cys Leu Pro Leu Leu
158 1      5      10      15
160 Leu Leu Leu Ser Gly Trp Ser Arg Ala Gly Arg Ala Asp Pro His Ser
161      20      25      30
163 Leu Cys Tyr Asp Ile Thr Val Ile Pro Lys Phe Arg Pro Gly Pro Arg
164      35      40      45
166 Trp Cys Ala Val Gln Gly Gln Val Asp Glu Lys Thr Phe Leu His Tyr
167      50      55      60
169 Asp Cys Gly Asn Lys Thr Val Thr Pro Val Ser Pro Leu Gly Lys Lys
170 65      70      75      80
172 Leu Asn Val Thr Thr Ala Trp Lys Ala Gln Asn Pro Val Leu Arg Glu
173      85      90      95
175 Val Val Asp Ile Leu Thr Glu Gln Leu Arg Asp Ile Gln Leu Glu Asn
176      100     105     110
178 Tyr Thr Pro Lys Glu Pro Leu Thr Leu Gln Ala Arg Met Ser Cys Glu
180      115     120     125
182 Gln Lys Ala Glu Gly His Ser Ser Gly Ser Trp Gln Phe Ser Phe Asp
183      130     135     140
185 Gly Gln Ile Phe Leu Leu Phe Asp Ser Glu Lys Arg Met Trp Thr Thr
186 145     150     155     160
188 Val His Pro Gly Ala Arg Lys Met Lys Glu Lys Trp Glu Asn Asp Lys
189      165     170     175
191 Val Val Ala Met Ser Phe His Tyr Phe Ser Met Gly Asp Cys Ile Gly
192      180     185     190
194 Trp Leu Glu Asp Phe Leu Met Gly Met Asp Ser Thr Leu Glu Pro Ser
195      195     200     205
197 Ala Gly Ala Pro Leu Ala Met Ser Ser Gly Thr Thr Gln Leu Arg Ala
198      210     215     220
200 Thr Ala Thr Thr Leu Ile Leu Cys Cys Leu Leu Ile Ile Leu Pro Cys
201 225      230      235      240
203 Phe Ile Leu Pro Gly Ile
204      245
207 <210> SEQ ID NO: 7
208 <211> LENGTH: 244
209 <212> TYPE: PRT
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:

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213 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:ULBP3

215 &lt;400&gt; SEQUENCE: 7

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216 Met Ala Ala Ala Ala Ser Pro Ala Ile Leu Pro Arg Leu Ala Ile Leu
217   1           5           10           15
219 Pro Tyr Leu Leu Phe Asp Trp Ser Gly Thr Gly Arg Ala Asp Ala His
220           20           25           30
222 Ser Leu Trp Tyr Asn Phe Thr Ile Ile His Leu Pro Arg His Gly Gln
223           35           40           45
225 Gln Trp Cys Glu Val Gln Ser Gln Val Asp Gln Lys Asn Phe Leu Ser
226           50           55           60
228 Tyr Asp Cys Gly Ser Asp Lys Val Leu Ser Met Gly His Leu Glu Glu
229   65           70           75           80
231 Gln Leu Tyr Ala Thr Asp Ala Trp Gly Lys Gln Leu Glu Met Leu Arg
232           85           90           95
234 Glu Val Gly Gln Arg Leu Arg Leu Glu Leu Ala Asp Thr Glu Leu Glu
235           100          105          110
237 Asp Phe Thr Pro Ser Gly Pro Leu Thr Leu Gln Val Arg Met Ser Cys
238           115          120          125
240 Glu Cys Glu Ala Asp Gly Tyr Ile Arg Gly Ser Trp Gln Phe Ser Phe
241           130          135          140
243 Asp Gly Arg Lys Phe Leu Leu Phe Asp Ser Asn Asn Arg Lys Trp Thr
244  145          150          155          160
246 Val Val His Ala Gly Ala Arg Arg Met Lys Glu Lys Trp Glu Lys Asp
247           165          170          175
249 Ser Gly Leu Thr Thr Phe Phe Lys Met Val Ser Met Arg Asp Cys Lys
250           180          185          190
252 Ser Trp Leu Arg Asp Phe Leu Met His Arg Lys Lys Arg Leu Glu Pro
253           195          200          205
255 Thr Ala Pro Pro Thr Met Ala Pro Gly Leu Ala Gln Pro Lys Ala Ile
256           210          215          220
258 Ala Thr Thr Leu Ser Pro Trp Ser Phe Leu Ile Ile Leu Cys Phe Ile
259  225          230          235          240
261 Leu Pro Gly Ile

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265 &lt;210&gt; SEQ ID NO: 8

266 &lt;211&gt; LENGTH: 263

267 &lt;212&gt; TYPE: PRT

268 &lt;213&gt; ORGANISM: Artificial Sequence

270 &lt;220&gt; FEATURE:

271 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:human ligand

for NKG2D receptor

273 &lt;400&gt; SEQUENCE: 8

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274 Met Arg Arg Ile Ser Leu Thr Ser Ser Pro Val Arg Leu Leu Leu Phe
275   1           5           10           15
277 Leu Leu Leu Leu Leu Ile Ala Leu Glu Ile Met Val Gly Gly His Ser
278           20           25           30
280 Leu Cys Phe Asn Phe Thr Ile Lys Ser Leu Ser Arg Pro Gly Gln Pro
281           35           40           45
283 Trp Cys Glu Ala Gln Val Phe Leu Asn Lys Asn Leu Phe Leu Gln Tyr
284           50           55           60
286 Asn Ser Asp Asn Asn Met Val Lys Pro Leu Gly Leu Leu Gly Lys Lys

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287 65              70              75              80
289 Val Tyr Ala Thr Ser Thr Trp Gly Glu Leu Thr Gln Thr Leu Gly Glu
290              85              90              95
292 Val Gly Arg Asp Leu Arg Met Leu Leu Cys Asp Ile Lys Pro Gln Ile
293              100              105              110
295 Lys Thr Ser Asp Pro Ser Thr Leu Gln Val Glu Met Phe Cys Gln Arg
296              115              120              125
298 Glu Ala Glu Arg Cys Thr Gly Ala Ser Trp Gln Phe Ala Thr Asn Gly
299              130              135              140
301 Glu Lys Ser Leu Leu Phe Asp Ala Met Asn Met Thr Trp Thr Val Ile
302 145              150              155              160
304 Asn His Glu Ala Ser Lys Ile Lys Glu Thr Trp Lys Lys Asp Arg Gly
305              165              170              175
307 Leu Glu Lys Tyr Phe Arg Lys Leu Ser Lys Gly Asp Cys Asp His Trp
308              180              185              190
310 Leu Arg Glu Phe Leu Gly His Trp Glu Ala Met Pro Glu Pro Thr Val
311              195              200              205
313 Ser Pro Val Asn Ala Ser Asp Ile His Trp Ser Ser Ser Ser Leu Pro
314              210              215              220
316 Asp Arg Trp Ile Ile Leu Gly Ala Phe Ile Leu Leu Val Leu Met Gly
317 225              230              235              240
319 Ile Val Leu Ile Cys Val Trp Trp Gln Asn Gly Glu Trp Gln Ala Gly
320              245              250              255
322 Leu Trp Pro Leu Arg Thr Ser
323              260

```

326 &lt;210&gt; SEQ ID NO: 9

327 &lt;211&gt; LENGTH: 710

328 &lt;212&gt; TYPE: DNA

329 &lt;213&gt; ORGANISM: Artificial Sequence

331 &lt;220&gt; FEATURE:

332 <223> OTHER INFORMATION: Description of Artificial Sequence:cDNA sequence  
of immune cell receptor

333 LCCR

335 &lt;400&gt; SEQUENCE: 9

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336 tttcgcagcac atgtgttttt atgagaatta tgctgagata gatttcttta catattcatc 60
337 aatgtctgaa gaagttactt atgcagatct tcaattccag aactccagtg agatggaaaa 120
338 aatcccagaa attggcaaat ttggggaaaa agcacctcca gctccctctc atgtatggcg 180
339 tccagcagcc ttgtttctga ctcttctgtg ctttctgttg ctcatgggat tgggagtctt 240
340 ggcaagcatg tttcacgtaa ctttgaagat agaaatgaaa aaaatgaaca aactacaaaa 300
341 catcagtgaa gagctccaga gaaatatttc tctacaactg atgagtaaca tgaatatctc 360
342 caacaagatc aggaacctct ccaccacact gcaacaata gccaccaa atgtgtcgtga 420
343 gctatatagc aaagaacaag agcacaaatg taagccttgt ccaaggagat ggatttggca 480
344 taaggacagc tggtatttcc taagtgatga tgtccaaaca tggcaggaga gtaaaatggc 540
345 ctgtgctgct cagaatgcc aacctgtgaa gataaacaac aaaaatgcat tggaatttat 600
346 aaaatcccag agtagatcat atgactattg gctgggatta tctcctgaag aagattccac 660
347 tcgtggatatg agagtggata atataatcaa ctctctgcc tggttaagtgt 710

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350 &lt;210&gt; SEQ ID NO: 10

351 &lt;211&gt; LENGTH: 231

352 &lt;212&gt; TYPE: PRT

353 &lt;213&gt; ORGANISM: Artificial Sequence

**VERIFICATION SUMMARY**

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